REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 11-17 are presently active in this case. Claims 11-17 having been amended by way of the present amendment.

In the outstanding Office Action, Claim 11 was objected to due to an informality.[2] Claims 11-16 were rejected under 35 U.S.C. §102(b) as being anticipated by Bolan et al (U.S. Pat. No. 4,982,371).[3] Claim 17 was rejected under 35 U.S.C. §103(a) as being unpatentable over Bolan et al in view of Kuroda et al (U.S. Pat. No. 5,548,146).

Firstly, Applicant acknowledges with appreciation the courtesy of Examiner Laura Schillinger to conduct an interview with the Applicant's representative on November 5, 2002 at which time the outstanding issues in the case were discussed. Secondly, Applicant acknowledges with appreciation the resetting of the shortened statutory period to coincide with the mailing of the revised Office Action following the interview. During the interview, a proposed amendment to Claim 11 which added a transitional term "comprising" was discussed to overcome the outstanding claim objection. The differences between the present invention and the applied art of Bolan et al were discussed. In particular, a proposed amendment to Claim 11 reciting a semiconducting layer covering an insulating layer and having two regions of heavy doped opposite conductivity types ***extending to the insulating layer*** was discussed. Applicant's representative pointed out that Bolan et al disclose that

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[2]While the Office Action on page 2, line 12, referred to "Claim 1", it is Claim 11 which has the missing transitional term.

[3]Applicants acknowledge with appreciation the courtesy of the Examiner to confirm the applied reference and the nature of this rejection by telephone and by facsimile prior to the personal interview.

heavy doped regions (as shown in Figure 16I of Bolan et al.) only extend into a part of the semiconducting layer and do not extend to insulator 52. An agreement was reached that a feature of two regions of heavy doped opposite conductivity types extending to an insulating layer distinguished from Bolan et al.

In view of the agreement reached during the interview, the present amendment amends Claim 11 to include the transitional term "comprising" and amends independent Claim 11 to define that the semiconducting layer covering an insulating layer has two regions of heavy doped opposite conductivity types with at least one of the two regions extending to the insulating layer. As such, it is respectfully submitted that the outstanding claim rejections and objection in the Office Action have been overcome.

Hence, Claim 11 and Claims 12-17 which depend from Claim 11 are believed to patentably define over the applied prior art.

As requested by the Examiner, Applicant points out that the advantages of the Zener diode defined in Claim 11 including the heavy doped opposite conductivity type regions extending to the insulating layer are detailed in the specification which states, in reference to the device fabricated by the steps illustrated in Figures 8-11, that:

> The Zener diode design is inexpensive...The protection function is optimized; the intrinsic withstand is increased and the voltage drop developed at the terminals of the protection diode during an electrostatic discharge is minimized.[4]

Finally, Applicant respectfully requests that the Information Disclosure Statement (IDS) filed October 25, 2001 be acknowledged by the return of a signed copy of the PTO 1449 form submitted with the IDS.

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[4]Specification, page 16, lines 17-24.

Consequently, in view of the present amendment and in light of the above discussions, the outstanding grounds for rejection are believed to have been overcome. The application submitted herewith is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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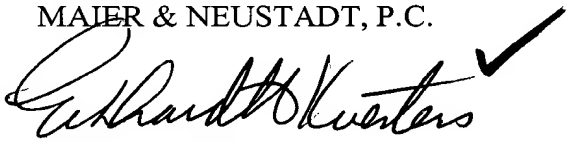

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IN THE CLAIMS

Please amend the claims as shown below:

11. (Amended) Device for protection of an electronic component against electrostatic discharges, [the device being made] comprising:

a plurality of Zener diodes formed in a semiconducting layer of a substrate, the semiconducting layer covering an insulating layer[,] and having two regions of heavy doped opposite conductivity types with at least one of the two regions extending to the insulating layer; and

[the device being connected to] a contact pin connected to the electronic component and connected through the Zener diodes to ground [to protect the component] in order to divert an electrostatic discharge and thereby protect the electronic component[, the device comprising at least one Zener diode connected to the contact pin to be directly polarized].

12. (Amended) Device according to claim 11, [further comprising] wherein said plurality of Zener diodes are mounted in series and connected to the contact pin [to be directly polarized].

13. (Amended) Device according to claim 11, wherein [the at least one Zener diode comprises two regions strongly doped with opposite conductivity types,] the two regions of heavy doped opposite conductivity types [being] are separated by a region doped to an average level according to either of the opposite conductivity types.

14. (Amended) Device according to claim 13, wherein the semiconducting layer [of the substrate is] comprises a silicon layer, [the doping of] the two regions of heavy doped opposite conductivity types comprise [with strong] doping [being] of the order of 10^{20} atoms/cm^3, and the [doping of the] region doped to an average [with medium] level [doping being] comprises doping of the order of 10^{18} atoms/cm^3.

15. (Amended) Device according to claim 11, wherein the [said] substrate is [an] a silicon-on-insulator SOI substrate.

16. (Amended) Device according to claim 12, wherein the plurality of the Zener diodes is [are] laid out adjacent to each other to form a series installation, and an electrical link between two adjacent Zener diodes [being] is obtained by a metallization.

17. (Amended) Device according to claim 12, wherein the plurality of the Zener diodes are laid out adjacent to each other to form a series installation, and an electrical link between two adjacent Zener diodes [being] is obtained by a silicide.